

IN THE CLAIMS

Claims 1-103 (canceled)

104. (new) A porous metal scaffold for use in an implantable medical device comprising:

a porous biocompatible metal network having an open cell structure wherein the openings of each cell are defined by webs with a metal skin surrounding an empty core, at least some of the metal skin is covered with a porous layer of biocompatible metal particles, the metal particles are bonded to the metal skin and other particles, the particle covered webs defining each cell having a pore size of 100 to 1000 μm for tissue ingrowth, the porous layer of metal particles including portions having a diameter of 20 to 100 microns.

105. (new) The porous metal scaffold as set forth in claim 104 wherein the metal skin surrounding the empty core has openings therein.

106. (new) The porous metal scaffold as set forth in claim 104 wherein the metal of the metal skin and metal particles are selected from the group consisting of titanium, titanium alloy, cobalt chrome alloy, niobium and tantalum.

107. (new) The porous metal scaffold as set forth in claim 104 wherein the final pore volume of the metal scaffold is 50% to 90%.

108. (new) The porous metal scaffold as set forth in claim 104 wherein the porous layer of metal particles includes portions having a diameter of 50 to 80 μm .

109. (new) The porous metal scaffold as set forth in claim 104 wherein the porous metal network has a thickness of .5 mm to 5 mm.

110. (new) The porous metal scaffold as set forth in claim 104 wherein the webs form a continuous metal skeleton of the porous metal scaffold.

111. (new) The porous metal scaffold as set forth in claim 104 wherein the porous layer of metal particles has neck portions extending between adjacent particles.

112. (new) A porous metal scaffold for use in an implantable medical device comprising:

a porous biocompatible metal network having an open cell structure wherein the openings of each cell are defined by webs with a metal skin surrounding an empty core, at least some of the metal skin is covered with at least one porous layer of biocompatible metal particles, the metal particles are bonded to the metal skin and other particles, the porous metal network defined by the metal skin covered by the porous layer of metal particles exhibit a pore size of 100 to 1000 μm for tissue ingrowth, each cell having a profile formed by surfaces of the porous layer of bonded particles having portions between 20-100 μm in diameter

113. (new) The porous metal scaffold as set forth in claim 112 wherein the metal skin surrounding the empty core has openings therein.

114. (new) The porous metal scaffold as set forth in claim 112 wherein the metal of the metal skin and metal particles are

selected from the group consisting of titanium, titanium alloy, cobalt chrome alloy, niobium and tantalum.

115. (new) The porous metal scaffold as set forth in claim 112 wherein the final pore volume of the metal scaffold is 50% to 90%.

116. (new) The porous metal scaffold as set forth in claim 112 wherein portions of the metal web are covered by particles which include portions having a diameter of 50 to 80 μm .

117. (new) The porous metal scaffold as set forth in claim 112 wherein the porous metal network has a thickness of .5 mm to 5 mm.

118. (new) The porous metal scaffold as set forth in claim 112 wherein the webs form a continuous metal skeleton of the porous metal scaffold.

119. (new) The porous metal scaffold as set forth in claim 112 wherein the web surface covered by particles has neck portions extending between adjacent particles.